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ABSTRACT

This pilot study examined the career self-efficacy of 75 college students (40 with disabilities and 35 without disabilities) using the Career Decision Making Self-Efficacy Scale-Short Form (CDMSE-SF) and semi-structured interviews. Career self-efficacy was defined as the belief that an individual can accomplish his/her career goals. Results indicated that students with disabilities scored significantly lower than their non-disabled peers on the CDMSE-SF. There did not appear to be any relationship between type of disability and career self-efficacy. However, an interaction between gender and disability was found, with male participants with disabilities scoring significantly lower than female participants with disabilities. There was also no relationship between scores of students with disabilities who were eligible for transition planning and those students who were not eligible due to age. Results led to recommendations concerning the transition planning component of the student's individualized education plan, instruction in self-advocacy skills at the secondary level, career counseling services of the campus career development center, and a possible mandatory career exploration course. (DB)

Running head: CAREER SELF-EFFICACY IN COLLEGE STUDENTS

Career Self-Efficacy in College Students with Disabilities: Implications for Secondary and Post-Secondary Service Providers

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Abstract

This pilot study examined the career self-efficacy of 75 college students through the Career Decision Making Self-Efficacy Scale-Short Form (CDMSE-SF) and semi-structured interviews. Participants included 40 students with disabilities and 35 students without disabilities. Results indicated that students with disabilities scored significantly lower than their non-disabled peers on the CDMSE-SF. There did not appear to be any relationship between type of disability and career self-efficacy, however an interaction between gender and disability was found. Male participants with disabilities scored significantly lower than female participants.

Laws such as Section 504 of the Rehabilitation Act of 1973, the American's with Disabilities Act (A.D.A.), and Public Law 94-142 have contributed to the increase of students with disabilities on college and university campuses. Section 504 and the A.D.A require postsecondary institutions and employers to give "an otherwise qualified individual" accommodations to lessen the impact the individual's disability might have on their education or career (Office of Civil Rights, 1992). Public Law 94-142 reauthorized in 1990 as IDEA mandated transition plans for all students with disabilities between 14 to 16 years of age and receiving special education services. Transition plans were to help students begin career and life planning to facilitate a transition from secondary education to work or postsecondary education. When combined, these laws were thought to increase the chances of a person with a disability of being successful in his/her endeavors after school.

However, the laws do not guarantee success nor do they speak for the individual with a disability. According to Section 504 and the A.D.A. an individual must self-identify to the postsecondary institution's disability service provider to receive accommodations. Hence, the student needs to have an understanding of his/her disability and the impact the disability will have on his/her performance both in the classroom and workplace, and to effectively advocate for him/herself (Mellard & Hazel, 1992; Minskoff, 1994). Individuals who can not explain their disability, foresee possible difficulties, or do not have strategies to compensate for their weaknesses may have trouble in their future/current endeavors (Adelmann & Vogel, 1990; Ryan & Price, 1992). On the other hand, individuals who can identify and determine the boundaries of their strengths and weaknesses enable themselves to make educated career choices and give accurate information to employers, coworkers, and employment agencies (Ryan & Price, 1992). Furthermore, individuals who do not pair their strengths with their career goals tend to feel disappointed and frustrated when examining possible careers (Adelmann & Vogel, 1990;

Hoy & Gregg, 1986). Current research indicates that a majority of students with disabilities do not utilize campus career development services (Friehe, Aunet, & Leuenberger, 1996). Finally, because students with disabilities may not recognize their strengths and limitations, they have a tendency to be unaware of the myriad of ways their disabilities might impact upon their career decisions.

The purpose of this pilot study was to examine three questions regarding the career self-efficacy and transition plans of college students with disabilities. First, do individuals with disabilities believe they can accomplish their career goals (career self-efficacy). Second, does the type of disability impact on their career self-efficacy? Third, are college students with disabilities who were eligible for transition plans more aware of the impact their disability may have on career plans compared to those students with disabilities without transition plans?

Methodology

Participants

Subjects included undergraduates from two liberal arts colleges in the Midwest. Out of 75 undergraduates, 46 were female and 29 were male. Ages of the students ranged from 19 to 51 (M = 25.42, SD = 9.06), with 19 seniors, 10 juniors, 15 sophomores, and 31 first year students.

Seventy-five students participated in this study: 40 students identified themselves as having a disability; the remaining 35 students did not report having a disability. Disability breakdown is as follows: learning (n = 25), hearing impairments (n = 5), blind (n = 2), chronic asthma (n = 1), autism (n = 1), health impairments (n=5), and cerebral palsy (n = 1) .

Survey Development

Survey questions were developed after a review of the literature from five areas: transition planning (Clark & Kolstoe, 1995), ability to describe one's disability (Ryan & Price, 1992), self advocacy (Minskoff, 1994), career development activities (Friehe et al., 1996), career choices (Baggett, 1993). The questionnaire contained 19 questions with five

directed at career development and transition activities, five centered on understanding of one's disability, three on the future impact of the disability, and six consisted of demographic information.

Career Decision Making Self-Efficacy Scale-Short Form

The CDMSE-SF evaluates an individual's degree of belief that he/she can successfully complete the necessary tasks for making informed, effective career decisions. The 25 item short form was developed from the original 50 item version of the CDMSE-SF (Taylor & Betz, 1983) in order to increase the scale's usefulness in counseling assessment and to provide a relatively brief pre-post measure for the evaluation of career intervention (Betz & Luzzo, 1996). Completion of the CDMSE-SF requires students to indicate the degree to which they are confident in their ability to complete 25 different career decision making tasks. Confidence ratings are made along a 10 point confidence continuum, ranging from 0 (no confidence at all) to 9 (complete confidence). Total scores are determined by adding the numbers from each question. Higher scores indicate higher levels of self-efficacy as it relates to the decision making process.

Psychometric evaluations of the CDMSE-SF have indicated adequate reliability and validity of the scale, with a coefficient alpha value of .94, and significant concurrent validity correlation's between the CDMSE-SF and other measures of vocational identity and career certainty (Betz & Luzzo, 1996).

Procedure and Materials

The university coordinator for Students with Disabilities Services at one of the participating schools sent letters to all students receiving accommodations for their disabilities. The coordinator invited students to take part in a career development project. Students were told that their participation was voluntary and that all data would remain confidential. Out of 80 letters sent out, 28 (35%) agreed to be involved in the project.

The Dean of the College of Education at the other university contacted students with disabilities by telephone, explained the purpose of the research and how it might benefit them. Twelve out of 28 (42.8%) agreed to take part in the research.

To obtain a sample of students without disabilities, letters were sent to 55 students enrolled in general psychology class or a junior level educational/psychology course at one of the two universities. Out of 55 non-disabled students, 35 (63%) agreed to participate.

All students participated in a semi-structured interview. The interview contained seven parts: information on career goals, major in college, disability, type of accommodation(s) they received, current and past work experience, and demographic information. Students with disabilities were asked to describe their disabilities using their own words and were then asked to rate themselves on how the disability is effecting their academic career, employment opportunity, and how their disability will effect them in the future as they embark on a career after college. Students took The Career Decision-Making Self-Efficacy Scale--Short Form (CDMSE-SF; Betz, Klein, & Taylor, 1996) to measure their self-efficacy.

Results

Disability impact on future career

When asked how disability could impact a career decision most students reported that their disability would not play a major role in the career decision making process. Examples follow:..

> "It could I mean there is always a possibility that it could affect it ummmm I don't know, I mean I don't know that much about the whole field where as if you know I can say what areas will be affected or not. Well I guess the whole idea of the speech and everything well that is kinda one of my disabilities so that could be a problem. Language probably. Anything verbal like I am a visual learner, I need to see things more so maybe like talking to someone might be hard for me to figure out but I haven't really thought about it. It also depends on where I am working and if you know I am working where I got deadlines, I can see where it might be a problem because I need a lot of time for writing reports" (Female student with LD, Speech Pathology Major).

"I think that the only thing effecting me is the letter writing. It's going to be things written down on paper that's gonna hurt me. I don't really know much [written communication] I have an idea, it concerns the job" (Female student with LD, Human Resources Management Major).

"I believe I'll have occasional problems....I believe I'd have a real hard time at anything that would involve a lot of reading" (Male student with LD, Undecided).

"I really don't really see it affecting it at all. Well maybe a little bit" (Female student with LD, Human Services).

Description of Disability

When students were asked to describe their disability the responses were vague or unspecified. Most students did not seem to know their strengths and weaknesses or how their disability manifested itself. Examples of four students follow:

"I have a difficult time comprehending reading and with reading comprehension it takes me a longer time to read like to compile all my thoughts when writing essays and stuff. A lot of it is when I am in like taking timed test situations I need more time to process my thoughts umm, like with memory I am definitely a visual learner. I need things to be written down. Like with things in sequence when taking notes can be hard when its written up on the board its hard for me I mean not officially but its hard for me to write down what the speaker is saying to what I am writing down into my notes it gets lost or mixed up along the way" (Female student, LD).

"I don't know, I really don't understand them that well to be able to tell somebody else what it is. They told me what it is but I really don't understand some of these high tech words. I describe it as best I could...that I have a slower time doing things than other people do. I need to concentrate more on ....I don't know" (Male student with LD).

"I have a hard time when I hear things and don't hear them, understanding what's going on. And a lot of times when I read in my book or whatever, I found that I don't comprehend what its saying. I am more of a visual learner and when I can see things like on the board and I can see handouts throughout class or like what's going to be said I can at least keep track of what's going on.. I can see and hear what is being said" (Female student, LD).

> "I have a hard time keeping up with reading because it takes a long time to get a little information out of a lot of material. I tend to fall behind because I overachieve because I try to make up for my problems by doing more than necessary on assignments. My attention span is awful, if I'm not paying attention it's not the teacher's fault" (Female student, LD).

CDMSE-SF Results

A two factor Analysis of Variance was conducted to examine the effects of gender and disability on the CDMSE-SF scores of the participants. Only one main effect was found. Students without disabilities (M= 189.740, SE= 4.10) had a higher self-efficacy score than those with disabilities (M= 167.813, SE= 3.784). The calculated value (F= 12.769, df= 1, 78) was significant at the .001 level.

There was an interaction between disability and gender (F= 6.24, df= 1, 78) which was significant at the .015 level. A Scheffe was performed to identify the differences among the possible interactions between gender and disability Males with disabilities had significantly lower self-efficacy scores than the other three groups (M= 156.750 , SE =5.86).

. Table 1 about here

In addition, an ANOVA was run on nature of disability, comparing the career self-efficacy of students with learning disabilities and other disabilities, (health impairments and sensory impairments). The calculated F values were not found to be significant.

One final result examined the CDMSE-SF scores of students who were eligible for transition planning and those students who were not eligible due to age. Analysis of Variance between the two variables showed no significant relationship.

Conclusions

In this pilot study we examined three factors relating to career self-efficacy: do individuals with disabilities have career self-efficacy similar to their peers without disabilities; does the nature of the disability impact career self-efficacy; what role, if any, did transition plans have on the career self-efficacy of college students with disabilities?

College students with disabilities may not be aware of the ways in which their disabilities can influence the career decision making process (Friehe, Aune, & Leuenberger, 1996). This pilot study concurs with previous research that college students may not be aware of how their disability effects their career decision making process. During the semi-structured interviews, students with disabilities were unable to express how their disability is manifested as well as how their disability might impact on future career plans. Unawareness of one's disability not only effects the career decision making process, but also hinders students' ability to effectively self advocate to postsecondary faculty and future employers (Allen, 1993).

Although their scores for career self-efficacy fell within an average range, college students with disabilities when compared to their non-disabled peers, had significantly lower scores. This result may be due to several factors such as low self-esteem, lack of self-awareness, lack of work experience and non effective or non existent transition plans (Ryan & Price, 1992; Adelman & Vogel, 1990). In addition, males with disabilities scored the lowest on career self-efficacy. Reasons for this result may be due in part to lack of motivation, underestimation of their abilities, lack of self-awareness, and lack of work experience or career exploration.

The data revealed that there was no difference between the type of disability and career self-efficacy. This may indicate that the nature of disability plays little or no role in a student's career self-efficacy. However, given the small sample size of this pilot study, further research in this area needs to be conducted to validate these findings.

Although there was no significant difference in CDMSE-SF scores in eligible students with and with out transition plans and those students not eligible for transition plans due to age, a possible relationship might be found if sample size was increased. While no significant relationship was found, there seems to be a trend showing that those students with transition plans have higher career self-efficacy scores. Students now enrolling in postsecondary settings currently are the first generation who were impacted by the mandate to have transition plans. One would think that transition planning for life after IDEA would produce more significant results. This pilot study would suggest that much more work is needed to increase career awareness, career self-efficacy, and self advocacy skills at the secondary level.

Limitations

This pilot study has two major limitations. The first relates to the small sample size. Results of this study cannot be generalized to other universities due to the small sample size. In addition, small sample size might have negative influence on transition plan data. A second limitation is the self reported data obtained from the measures that were used. Self reported information may not be accurate due to participants' personal biases and ability to recall information that could be at least eight years old. Future investigation should attempt to remediate these limitations.

Recommendations

After reviewing the results of this pilot study and those listed from the literature review, the following four recommendations are suggested:

1. There should be a stronger emphasis on development and follow through of the transition planning component of the individual education plan for students with disabilities. This might include for example career exploration involving such activities as

job shadowing, internships, cooperative learning experiences within the community, and instruction in job seeking skills.

2. Secondary educators should consider providing instruction to students with disabilities on how to effectively self advocate which would include helping the student explore and identify their strengths and weaknesses. More importantly, secondary educators and disability service providers should empower the students to understand the full extent of their disability as it relates to postsecondary academics, social interaction and career development after IDEA. Skills in these areas are imperative for a successful transition to postsecondary education where the student must become his/her own advocate.

3. The results of this study suggest that students with disabilities have a lower career self-efficacy than their non-disabled peers. Postsecondary service providers may want to consider forming a closer relationship with the campus career development center. Career counseling by disability service providers should move beyond academic advising and enlist the help of community resources such as vocational rehabilitation centers and faculty to provide for career exploration. A good example is the Trio program at Arizona State University which requires all students with disabilities to be registered with the career development center on campus, to develop a working resume, and to seek out an internship before the start of the junior year to remain enrolled in the program.

4. To ensure that all students with disabilities receive career development exposure, a mandatory career exploration course for all students might be beneficial. This would allow all students on campus to explore career interests and foster the career decision making process.

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Table 1

Career Self Efficacy Scores of College Students with and without Disabilities (*)

Category	Mean	SE	N
Males with Disabilities	156.750	5.861	16
Males without Disabilities	192.615	6.503	13
Females with Disabilities	178.875	4.786	24
Females without Disabilities	186.864	4.999	22

(*) $_1F_{71} = 6.240$, $p \leq .015$

Scheffe

Males without disabilities > Males with disabilities

Females with disabilities > Males with disabilities

Females without disabilities > Males with disabilities

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